



# **MVR-508 8ch Hybrid Mobile DVR**

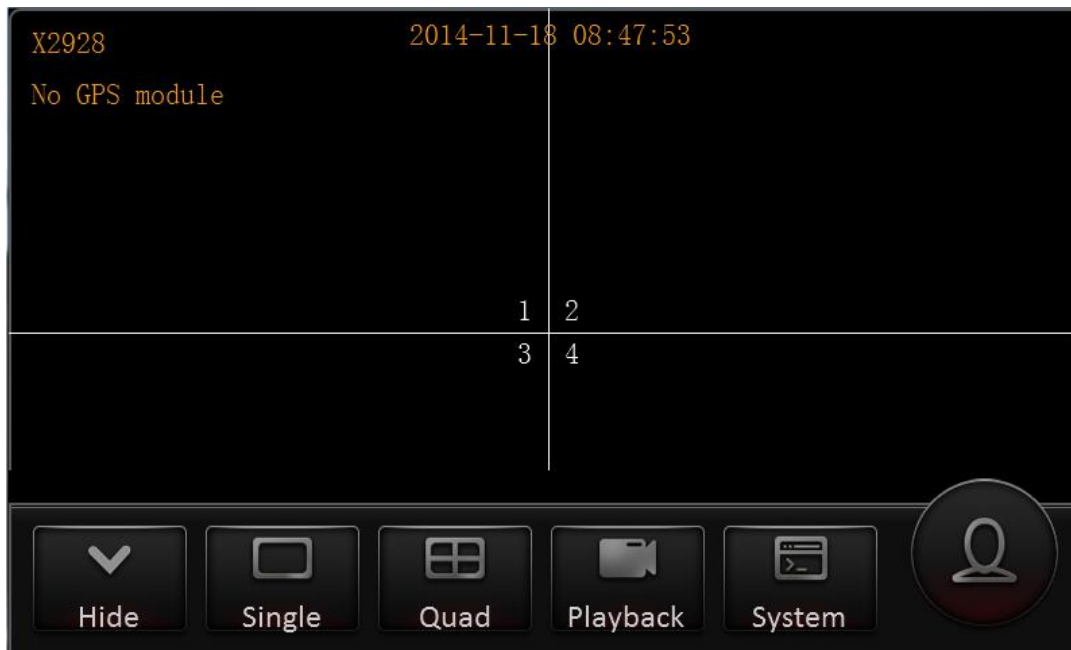
## **Function Operating Instruction**

This manual was complete and correct at the time of printing. The ongoing development of the products may mean that the content of the user guide can change without notice.

The manual will be kept updating periodically, and software referred as well.

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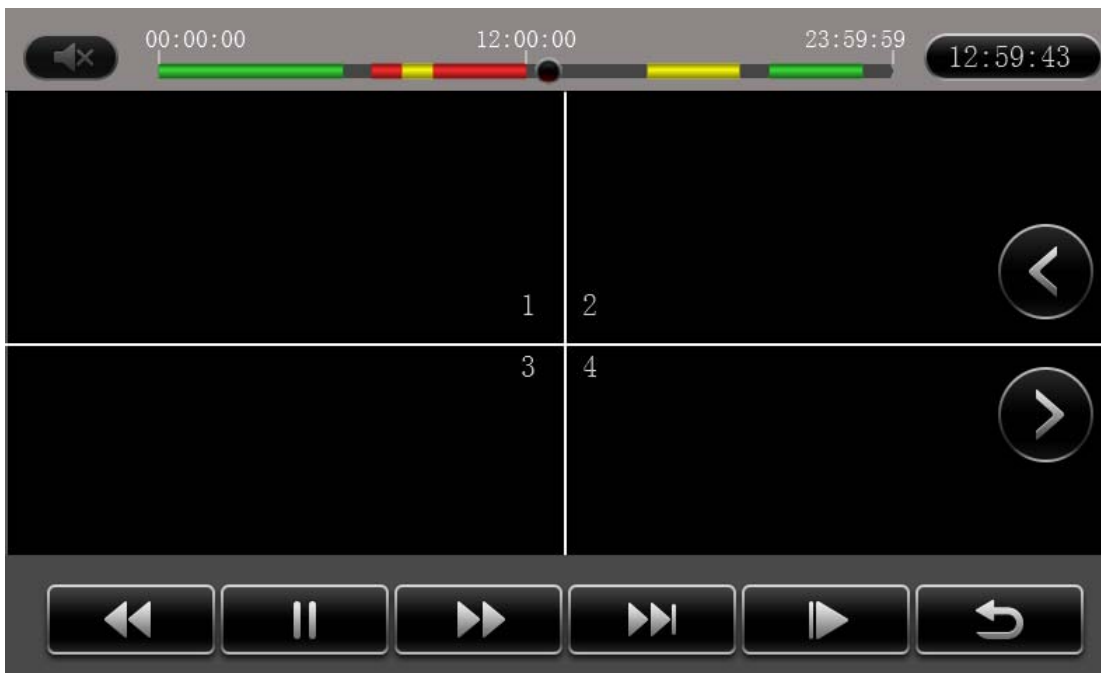
# 1 Live-view/Local Login



Quick operation items when live-view:

1. System: Check the device status information .
2. Playback: Playback the video for all channels two minutes prior, easy for the police to check the video when patrolling.
3. Fast switching single-window
4. Fast switching four-window
5. Fast switching nine-window



## 1.1 Playback





1. You can drag the time line, and you can manually set the playing time, easy to find the time point needed.
2. There are three colors to distinguish the type of the video: **Green:** Normal video, **Red:** Alarm video, **Yellow:** Locked video.
3. The multi-way synchronization frame forward function, one frame when clicking and it is easy for the customer to find the details.
4. Support 16 and 1/16 fast forward.
5. Playback automatically play the video of two minutes prior, the minimum of playback delay is 1 minute.


## 1.2 System


### 1.2.1 Version Information


2014-12-18 System

  
Version info

  
Modules

  
Server Status

  
Environment

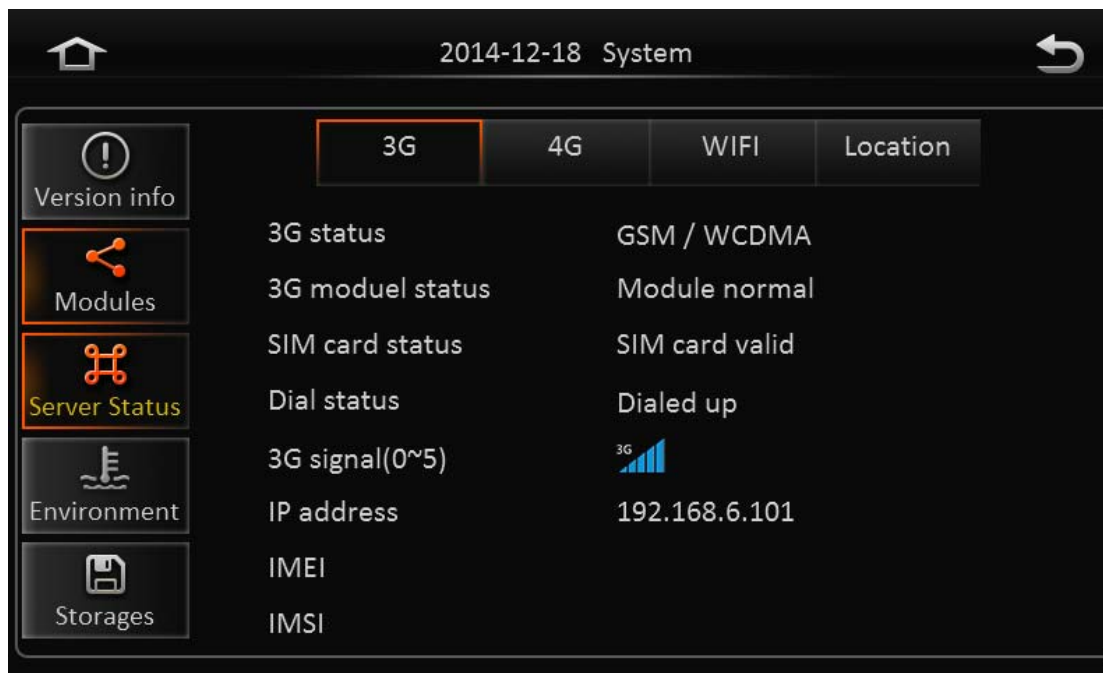
  
Storages

Device name	A5-III
Unit ID	0
Serial Num	0082000040
MAC address	00:11:22:33:44:55
Firmware version	
MCU version	N9M-STM32-MCU-T406121
CP3/4 Version	CP4-M-STM8-MCU-T408152

1.Check the Unit ID and the firmware version.

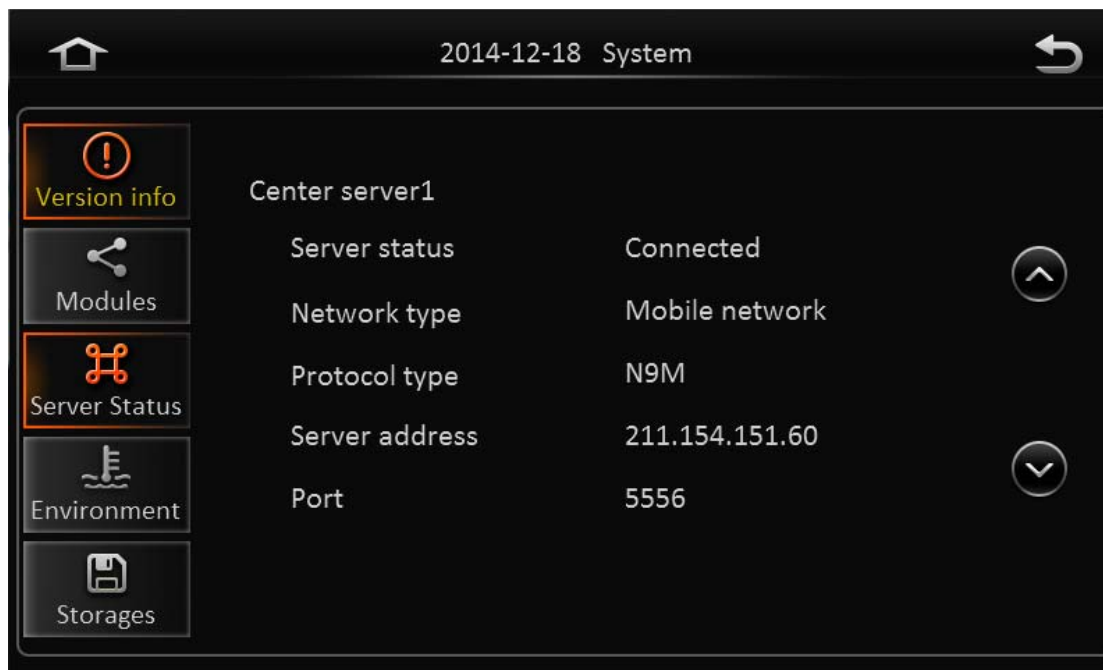
2.Unique identification for reporting the platform: Unit ID, this number will be gotten by the device automatically.

## 1.2.2 Modules



- 1.Check the module status of 3G/4G and WIFI, and also the working status of the GPS module.
- 2.MVR-508 communication modules for dual-mode, 3G and 4G can exist at the same time. Dual-mode support different carriers, but the module can not be repeated.
- 3.3G and 4G signal strength can be distinguished.

## 1.2.3 Server status



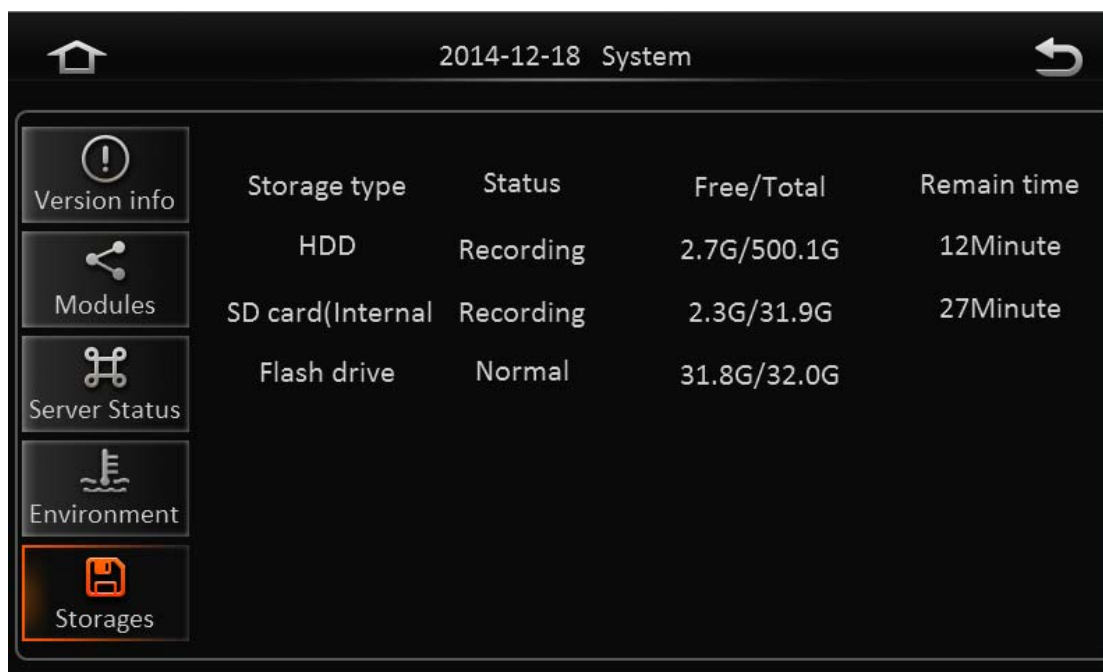
- 1.Check the connection status of the center server and the IP port status.
- 2.There are maximum 6 center servers can be added.

## 1.2.4 Environment



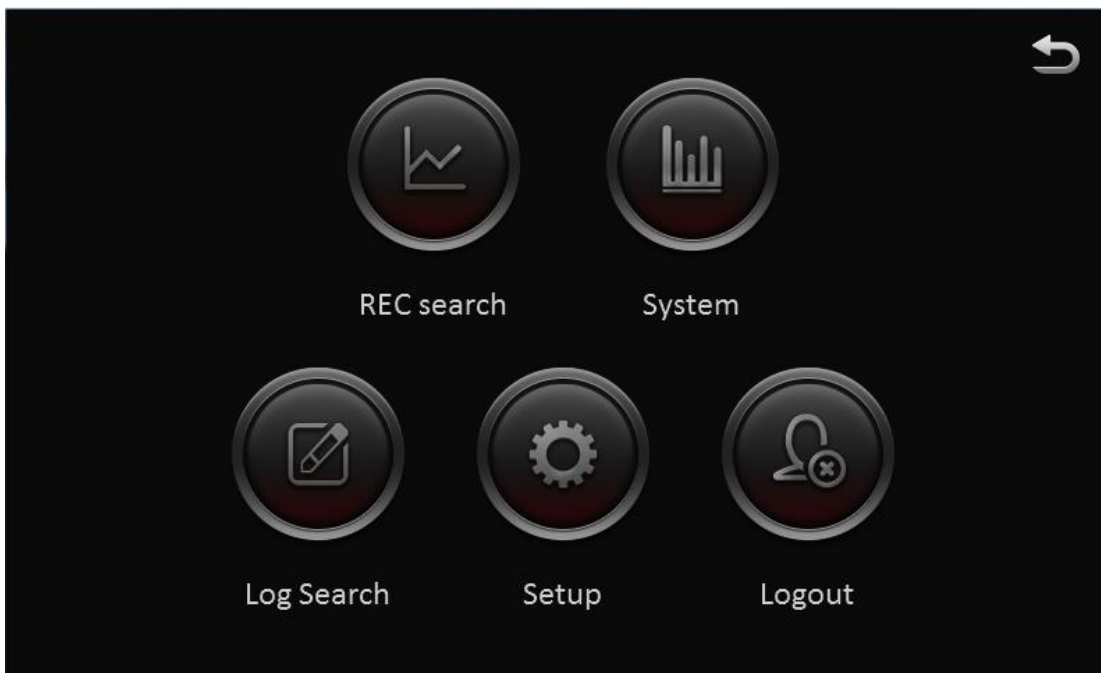
- 1.Internal temperature sensors: there are temperature sensors both in the HDD and motherboard.
- 2.The voltage is the real value of voltage.

## 1.2.5 Storage



- 1.Memory types are divided into: hard drive, built-in SD card, external SD card, thumb driver.
- 2.Status are: Blank (not found), Unformatted (storage media format is incorrect), Normal (in the correct format, but no video), Recording.

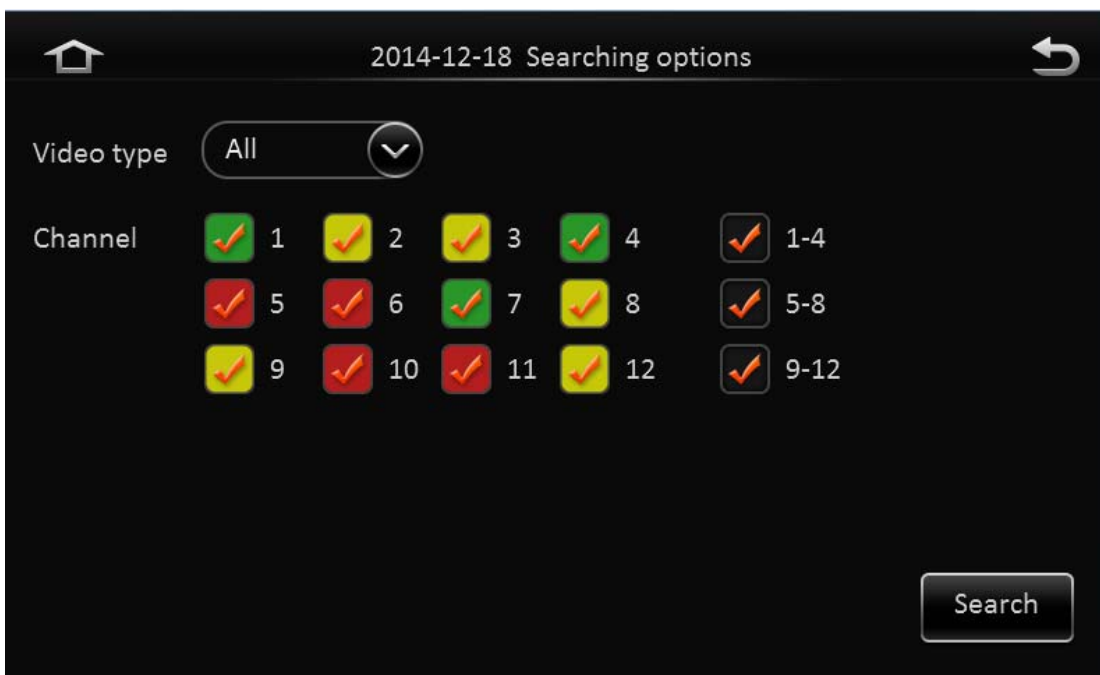
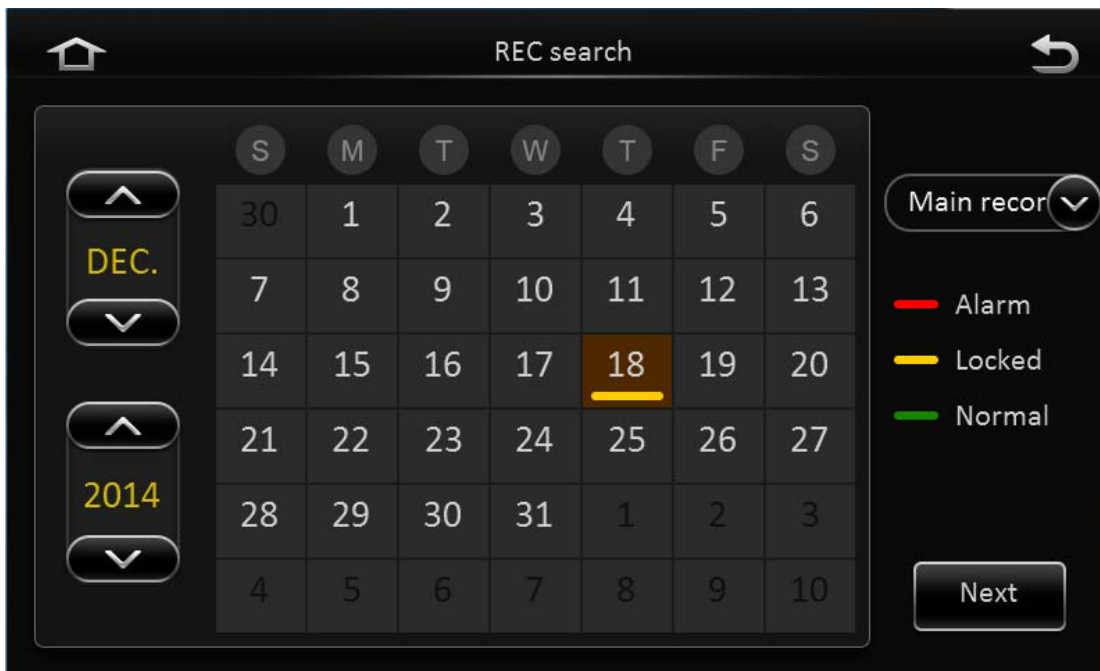
## 2 Function Interface



The main four modules:

1. REC search and playback, support several types of searching for different requirements.
2. Log search, including the detailed operating information and the alarm video can be checked at the same time.
3. System information checking, including all kinds of device information.
4. System setup, dimensional horizontal and vertical layout, which is easy to understand and operation.

## 2.1 REC research



Features:

1. Use different colors to distinguish different videos: **Green:** Normal video, **Red:** Alarm video, **Yellow:** Locked video.

2. Offer four search conditions: Date, recording type (main video, sub video, mirror recording), stream type, channel selection.

Explanation: You can only choose sub-stream recording or mirror recording. The parameters of mirror recording are the same as the main recording parameters, the parameters of the sub-stream recording can be set independently.

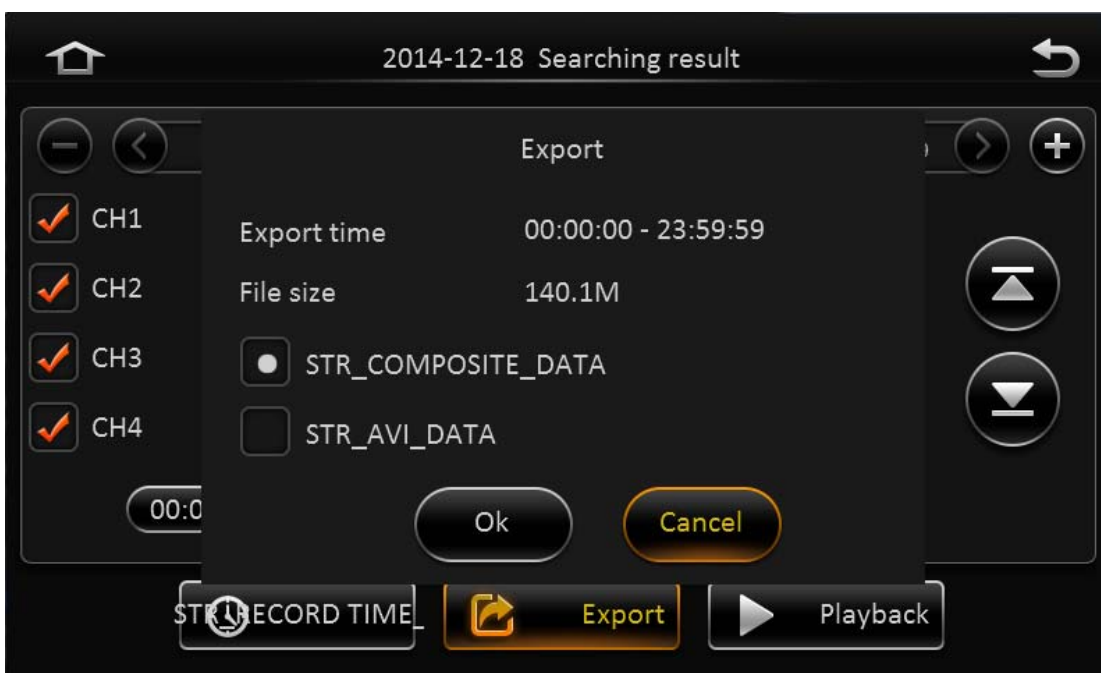
Application: Easy for customers to select the channels in alarm condition or locked video.



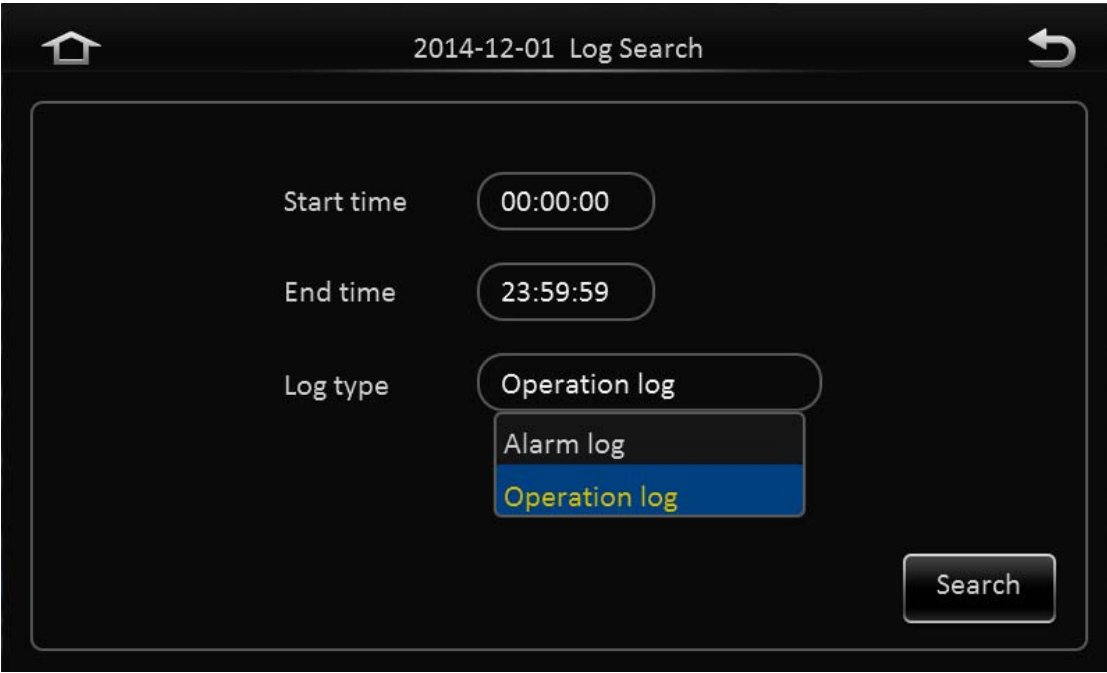


#### Features:

3. Fast sliding operation, two input types: Touch and drag or manually fill in the start time end time to complete clips.
4. Diversified exporting ways, export two kinds of files: the original data file , AVI format.
5. To the day of the last normal video playback time, freezes, does not automatically exit



## 2.2 Log search



2014-12-01 Log Search

Start time 00:00:00

End time 23:59:59

Log type Alarm log

Alarm type All

All

IO alarm

Panel alarm

Search

Note: Event search function integrated into the log search function, use colors to distinguish the log type: Green: Operation log, Red: Alarm log, Yellow: Locked log.

Feature 5: Search for the log information according to the date, time as well as the log type. There are three kinds of logs: Operation log, alarm log, locked log. The type of the alarm log is optional.

Feature 6: The information can export to the Easy Check, and the Easy Check can support SD card.

## 3 Setup

### 3.1 Basic setup

#### 3.1.1 Register information

##### 3.1.1.1 Device information



The screenshot shows a software interface for device setup. At the top, there is a navigation bar with icons and labels for 'Basic Setup' (highlighted with an orange border), 'Surveillance', 'Collection', 'Alarm', and 'Maintenance'. Below this, a sub-menu contains 'Regist info' (highlighted with an orange border), 'Device Info' (active), 'Vehicle Info', and 'Driver info'. On the left side of the main panel, there are buttons for 'Time setup', 'Startup', 'User setup', and 'Network'. The main area displays 'Device ID' followed by a text input field containing the number '0'. A 'Save' button is located in the bottom right corner.

1. Device ID has no applications at present.

##### 3.1.1.2 Vehicle information

The screenshot shows the 'Basic Setup' screen with the 'Vehicle Info' tab selected. The 'Device ID' field is highlighted with a red border and contains the value '0'. The left sidebar contains buttons for 'Regist info', 'Time setup', 'Startup', 'User setup', and 'Network'. The top navigation bar includes 'Basic Setup', 'Surveillance', 'Collection', 'Alarm', and 'Maintenance'. A 'Save' button is located at the bottom right.

The screenshot shows the 'Basic Setup' screen with the 'Vehicle Info' tab selected. The 'Vehicle number' field is highlighted with a red border and contains the value 'X2928'. The 'Vehicle plate' and 'Line number' fields are empty. The left sidebar contains buttons for 'Regist info', 'Time setup', 'Startup', 'User setup', and 'Network'. The top navigation bar includes 'Basic Setup', 'Surveillance', 'Collection', 'Alarm', and 'Maintenance'. A 'Save' button is located at the bottom right.

1.Vehicle number: is related to the vehicle, it will be used when the PAD connects to the device.

Note: The vehicle number will be used when using the Easy Check, when the vehicle number is blank, then it will use the default device ID. When you can only search for the device when the device number is not blank, then it will use the vehicle number, and you can use the vehicle number to search for the device by the vehicle number.

2.Vehicle plate: can be attached to the vehicle and need to be entered manually.

3.Line number: can be attached to the vehicle and need to be entered manually.

### 3.1.1.3 Driver information

The screenshot shows the 'Driver info' configuration screen. At the top, there is a navigation bar with icons for Home, Basic Setup (selected), Surveillance, Collection, Alarm, and Maintenance. Below this, there are tabs for 'Regist info', 'Device Info', 'Vehicle Info', and 'Driver info' (selected). On the left side, there is a vertical menu with buttons for 'Time setup', 'Startup', 'User setup', and 'Network'. The main area contains two input fields: 'Driver number' and 'Driver name'. A 'Save' button is located at the bottom right.

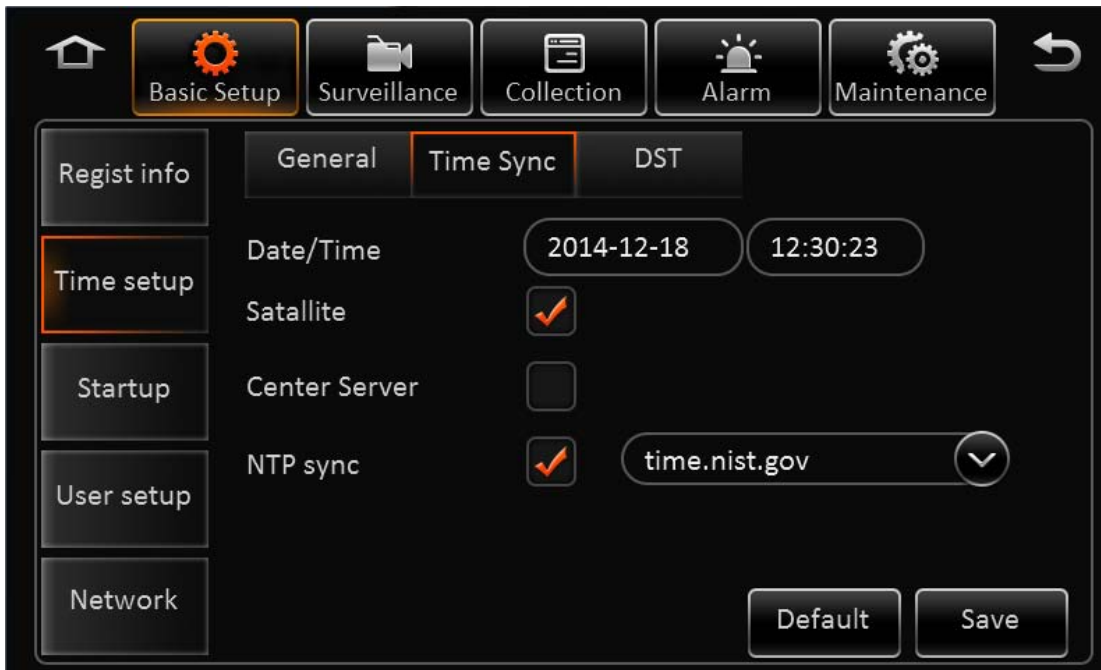
1. Corresponding bound vehicle, you can manually enter.

### 3.1.2 Time setup

The screenshot shows the 'Time setup' configuration screen. At the top, there is a navigation bar with icons for Home, Basic Setup (selected), Surveillance, Collection, Alarm, and Maintenance. Below this, there are tabs for 'Regist info', 'General' (selected), 'Time Sync', and 'DST'. On the left side, there is a vertical menu with buttons for 'Time setup' (selected), 'Startup', 'User setup', and 'Network'. The main area contains three settings: 'Date format' set to 'YEAR-MONTH-DAY', 'Time format' set to '24 Hours', and 'Time Zone' set to '(GMT+08:00)BEIJING, CHONGQING, HONGKONG'. There are 'Default' and 'Save' buttons at the bottom right.

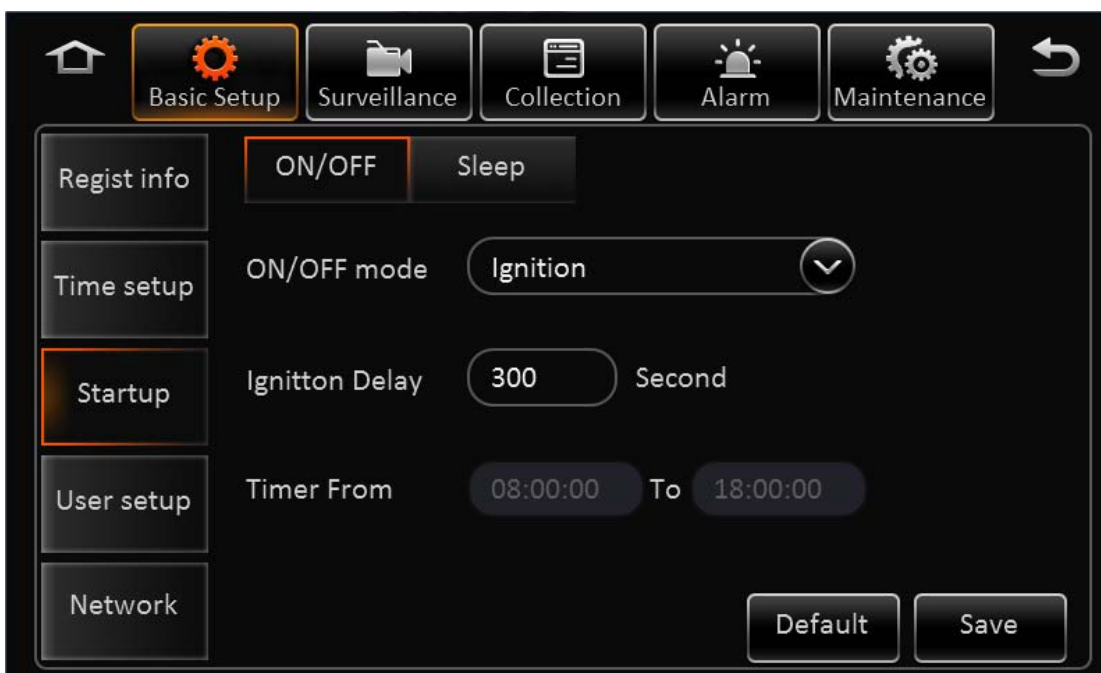
Feature 1: Two-dimensional representation of the pattern of vertical and horizontal direction.

Feature 2: Reboot only when you change the video format.



Feature 1: Three types of time sync: GPS, network, server, it is easy for the device to sync the time according to the server. Application: the bus will report the information to the server when it arrives the stop, it will cause the incorrect reporting if the time is not right.

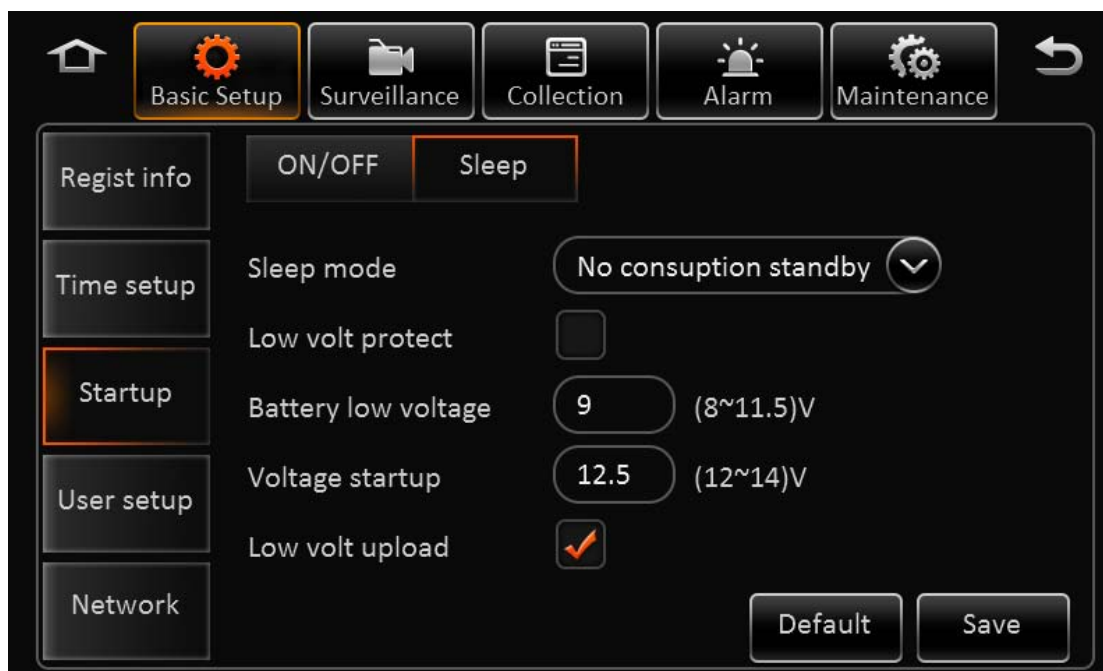
### 3.1.3 Start up



Feature 1: Turn off delay time 0-24h, schedule set streamlined, no longer supports a rest day working schedule

Feature 2: Three kinds of switch mode: Ignition, timer, ignition and timer.

Application: Long shut down delay. If you choose the ignition and timer, then the device will turn on if ether of them is satisfied, but the device will turn off when both of them are satisfied.



Feature 1: Zero-power standby mode

Feature 2: Support low-voltage protection, low voltage reporting.

Application: The real standby power is less than 1W, it is the 1/10 of the system and nearly no power cost, which is easy for the device to standby. The device will go into standby when the voltage is low and report to the server, if the operation stuff get many reports, then he may check the vehicle battery.

### 3.1.4 User setup



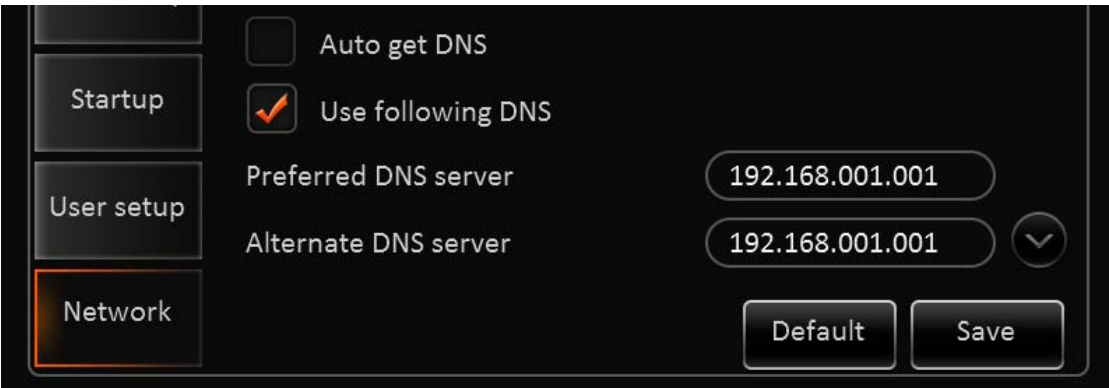
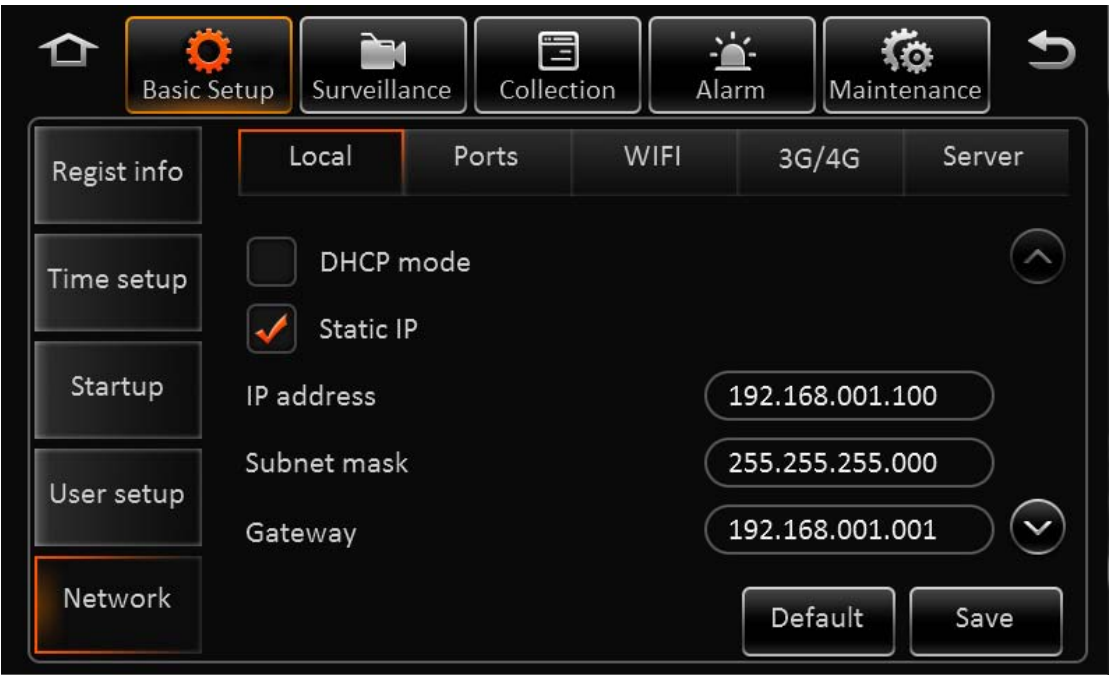
Feature 1: Supports up to three users (one administrator and two ordinary users), the number of users can be customized. Application: Ordinary users can view the video, log, can not operate any system settings. There are currently no user rights to edit functions.

Feature 2: Time out and exit the menu options to meet different customers operating habits



# 3.1.5 Network

## 3.1.4.1 Local



Feature 1: DHCP mode (Automatically get IP) New candidate DNS server (DHCP mode is selected automatically obtain DNS)

Application: It is easy for the customers to connect to the mobile device such as 3G router.

### 3.1.4.2 3G/4G

Basic Setup | Surveillance | Collection | Alarm | Maintenance

Regist info | Local | Ports | WIFI | **3G/4G** | Server

Time setup | 3G

Startup | Module type | WCDMA

User setup | Network type | Mix

Network | APN

Default | Save

Basic Setup | Surveillance | Collection | Alarm | Maintenance

Regist info | Local | Ports | WIFI | **3G/4G** | Server

Time setup | User name

Startup | Password

User setup | Number

Network | Certification | CHAP

Default | Save

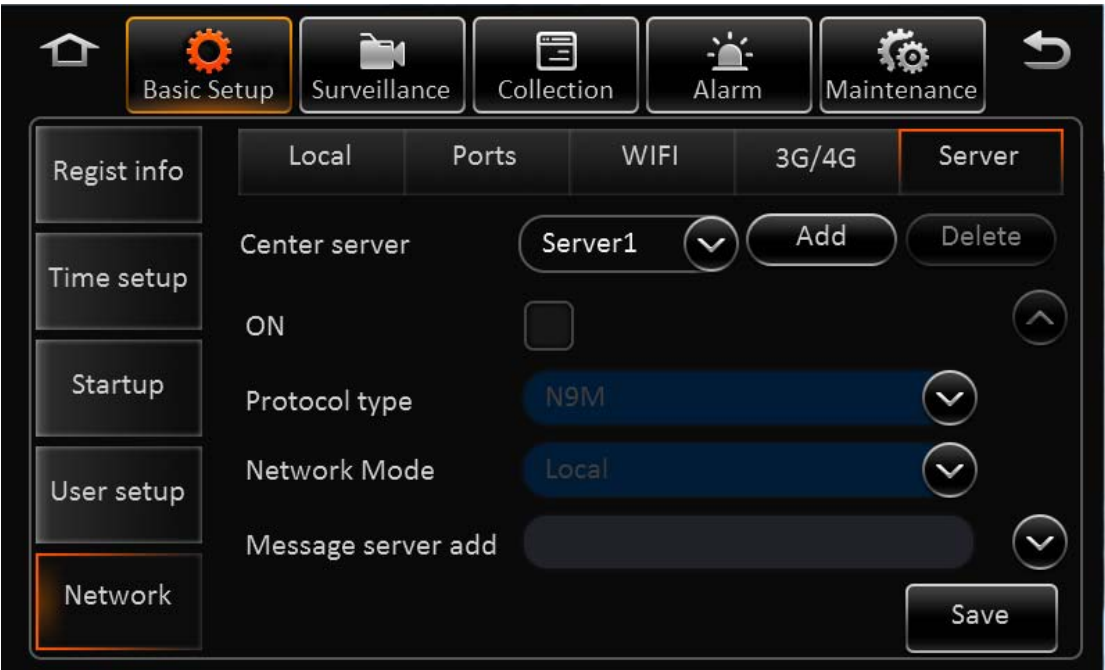
Feature 1: New 4G / 3G / 2G network hybrid mode, and support network type fixed pattern.

Feature 2: Support for dual-mode network modules, two 4G modules can work at the same time.

Feature 3: New PAP authentication mode, support for VPN network authentication

Application: Automatically detect network conditions and selects the most appropriate network, Network type fixed pattern is to solve, different types of networks in some countries different frequency bands, the problem can not be achieved automatically jump.

### 3.1.4.3 Server



Feature 1: You can set up to six servers.

Application: Multi-server can meet customers respectively WIFI / 3G / 4G networks perform different functions, such as using WIFI achieve download the raw data, with 3G / 4G enables remote monitoring

## 3.2 Surveillance

### 3.2.1 Live View

#### 3.2.1.1 Preview



Feature 1: Image settings can be one-time setup including brightness, contrast, color, saturation.

Feature 2: Parameters can be copied to any channel or all channels

Application: Convenient one-time set the image parameters, each parameter needs to be set before using the remote control at the screen one by one channel.

## 3.2.2 Record

### 3.2.2.1 General



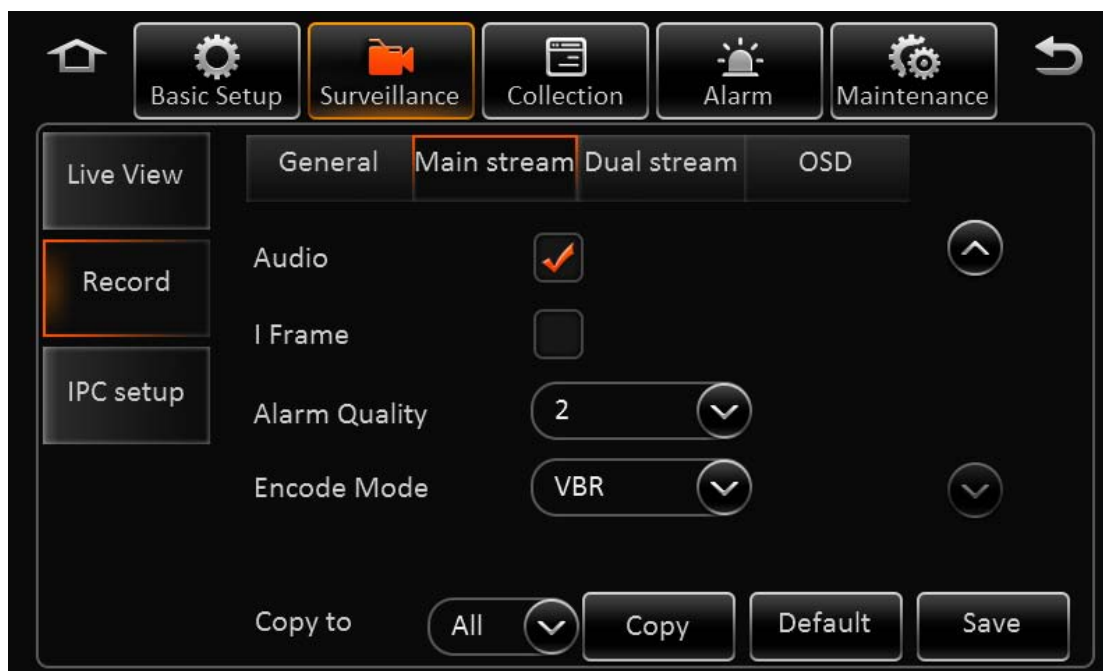
Feature 1: Video data overwrite mode, time coverage, according to the capacity of coverage

Feature 2: Pre-recorded time 0-60mins

### 3.2.2.2 Main stream



Feature 1: Added WD1, WHD1, WCIF resolution (required 600 lines or more analog camera)



Feature 2: Added CBR (Constant Bit Rate), VBR (dynamic bit rate) coding mode, in order to accommodate the use of various camera scene.

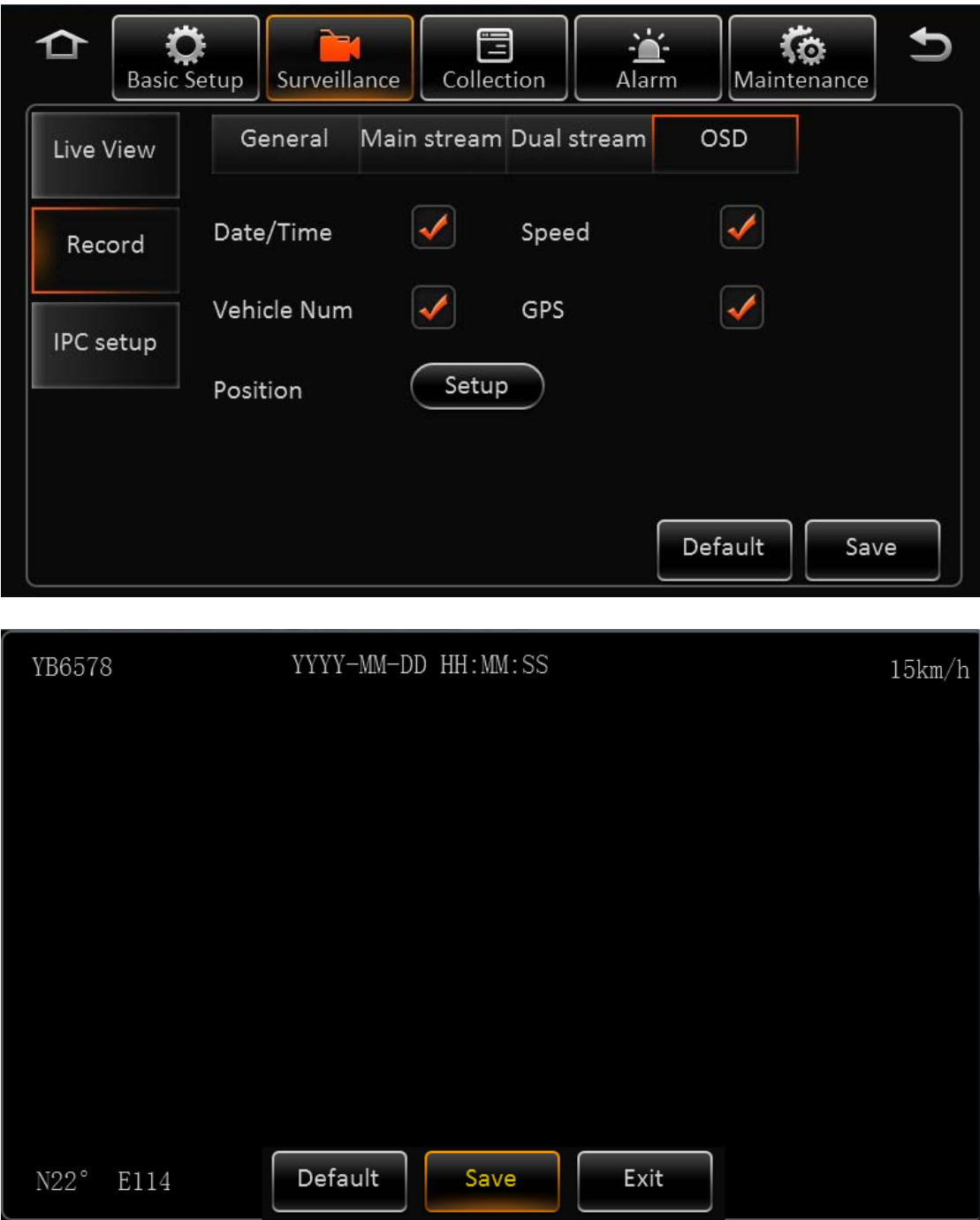
Application: Outside of the vehicle, when a large video screen changes, under VBR mode, the bit rate is automatically adjusted to save storage space. Inside of the vehicle, when the video screen is small change, CBR mode, the bit rate unchanged, in order to obtain the best results.

### 3.2.2.3 Dual Stream



Feature 1: Our products use three kinds of stream, the main stream, sub-stream dual-stream video, as well as other sub-stream, known as network transmission stream. Network transmission stream is designed for remote monitoring, preview on the the mobile client.

### 3.2.2.4 OSD overlay



Feature 3: You can drag OSD display position information, improve the efficiency of OSD settings.

Note: OSD position adjustable in live-view , but it is non-adjustable in the preview.

Application: easy for customers to view details according to personal habits and do reasonable arrangements.

### 3.2.3 IPC Setup



Feature 1: Support PON protocol (own intellectual property rights), POE protocol IPC.

Feature 2: The system can automatically assign IP addresses to the PON protocol IPC, support for one-key set IPC (Our owned IPC) and MDVR host adapter.

Application: Operation Setting is as simple as the setting of analog cameras, simply click on the shortcut set.



# 3.3 Collection

## 3.3.1 General

### 3.3.1.1 Sensor

Basic Setup

Surveillance

Collection

Alarm

Maintenance

General

Sensor

Serial Port

Speed

Sensor number

1

Sensor name

Sensor1

OSD Name

S1

Copy to

All

Copy

Default

Save

1. Supports 8-channel sensor input.

### 3.3.1.2 Serial port

Basic Setup

Surveillance

Collection

Alarm

Maintenance

General

Sensor

Serial Port

Speed

COM1

None

4800

COM2

None

4800

COM3

None

4800

COM4

None

4800

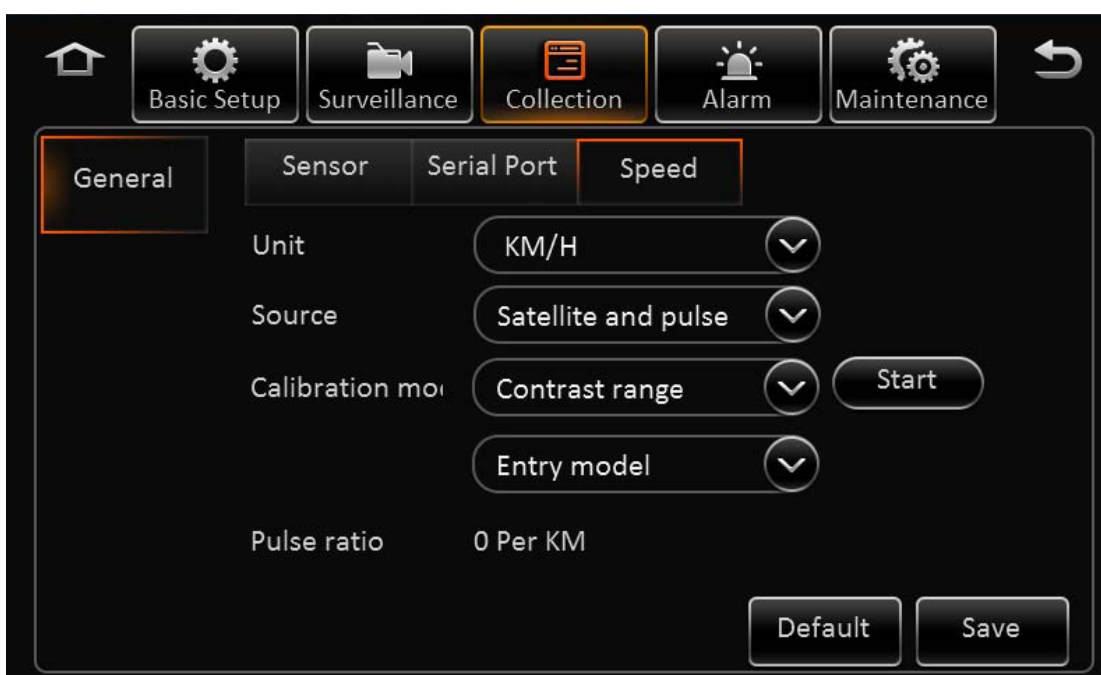
Default

Save



1.Supports a serial port, and each port can expand four expansion ports.

### 3.3.1.3 Speed



Feature 1: Smart pulse calibration coefficients

Application: Add a manual input mileage to speed calibration mode, you only need to record the mileage at the beginning, and after the end of the study fill the difference between the two mileage and you can calculate the pulse factor.

## 3.3.2 Capture setup

### 3.3.2.1 Timing capture

1. Set capture start time, end time, and capture interval.
2. Report type is to report to the FTP server.
3. Capture channels can be set up.
4. Quality, resolution, and the number of sheets in a row to capture currently can not be located.

### 3.3.2.2 Trigger capture

1. It is alarm capture, for continuous alarm status, capture time interval can be set.

## 3.4 Alarm

### 3.4.1 General

#### 3.4.1.1 Speed alarm



Feature 1: Add alarm level.

Applications: according to different alarm levels, CEIBA-II will handle events in different ways.

Alarm linkage

Channel	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	
	<input type="checkbox"/> 9	<input type="checkbox"/> 10	<input type="checkbox"/> 11	<input type="checkbox"/> 12	
Post recording	1 Min				
Lock	<input type="checkbox"/>				
3G Network	<input type="checkbox"/>				
Linkage IO output	<input type="checkbox"/> 1	<input type="checkbox"/> 2			
<input type="button" value="OK"/> <input type="button" value="Cancel"/>					

Alarm linkage

Lock	<input type="checkbox"/>	
3G Network	<input type="checkbox"/>	
Linkage IO output	<input type="checkbox"/> 1 <input type="checkbox"/> 2	
Output Time	0	Second
Alarm Upload	<input type="checkbox"/>	
Single full screen	None	
PB alarm duration	0	Second
<input type="button" value="OK"/> <input type="button" value="Cancel"/>		

Feature 1: Single-channel alarm can be set.

Feature 2: New multi-directional alarm linkage, associated with multiple related businesses: alarm duration is adjustable.

Feature 3: An alarm is triggered, reporting is optional.

Feature 4: Alarm trigger recording extended recording time 0-30mins

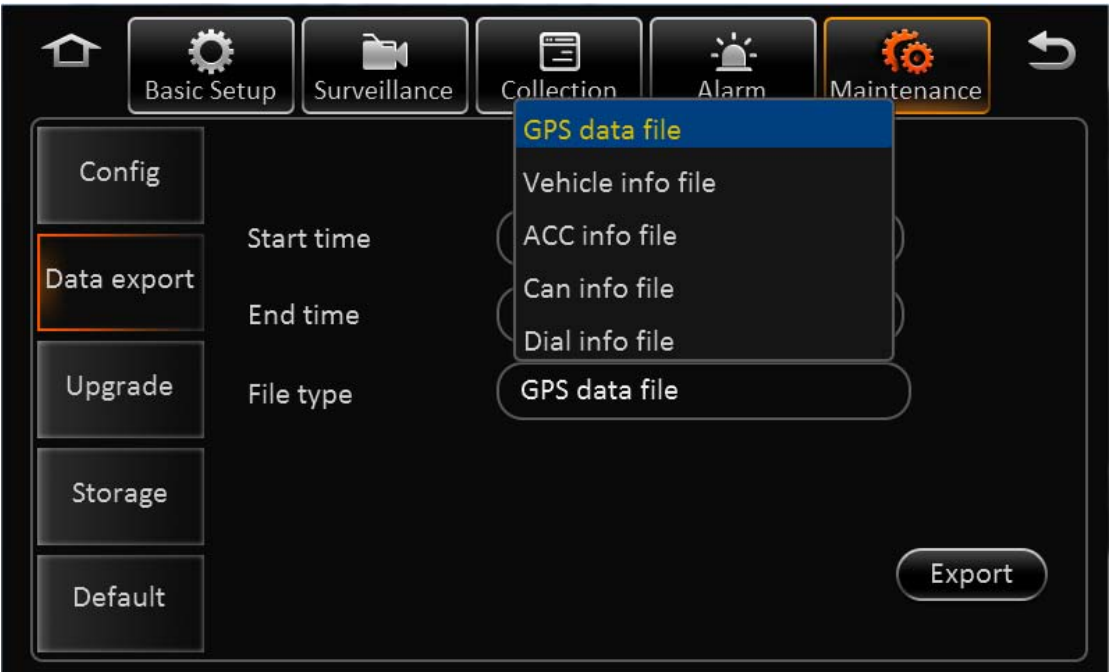
Application: Can trigger an alarm-related businesses, joint channel, 3G networks, single-channel full-screen, alarm reporting, etc.

# 3.5 Maintenance

## 3.5.1 Configuration



## 3.5.2 Data export



Feature 1: Derive different types of detection data based on the time  
Application: the convenience of customers to view different types of data according to the needs.

### 3.5.3 Upgrade



Feature 1: Unified upgrade package, sub module design (rootfs, filesystem, business logic, drive).

Feature 2: Comprehensive upgrade of power failure protection, unexpected power backup system continues to boot the system to complete the upgrade

Application: Customers do not need to worry about the quantity of the upgrade files. When the batch upgrade, reduce waste data traffic; provide complete and reliable power protection solution upgrade.